



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,011	05/24/2001	Gerhard Maitz	38777/234605	3789
826	7590	10/06/2004	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			LIEN, TAN	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/865,011	MAITZ, GERHARD	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tan Lien	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 24 May 2001.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 24 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/24/01</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTIONS**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. A1972/98, filed on 11/24/1998.

### ***Claim Objections***

Claims 3, 5 are objected to because of the following informalities: The limitation "when and as needed" is unnecessary and should be changed to "when needed". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 17 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the Examiner what the limitation "part-processes" means in the claims. The Examiner will treat it as the regular limitation "processes" in the claims.

Art Unit: 2141

Claim 13 recites the limitation "programming means" in line 29 of page 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the Examiner what the limitation "set up to cover automation elements" means in the claim. The Examiner will construe the claim to mean "wherein automation elements have functions."

Claims 24-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "automation projects" is not mentioned in the specification and it lacks antecedent basis. The Examiner will construe the limitation to mean "automation category."

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 and 26-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Pressnall et al (US Patent 5,491,625).

Art Unit: 2141

Claim(s) 1, 17: Pressnall teaches an automation system for solving a process-related task definition or operating a technical system, comprising:

a computer system, which, in at least one field level with field bus components (Fig. 2, ref. 52a-c) and automation devices (col. 5, lines 65; wherein the field bus components are data communication link such as fiber optic cable and field level devices are field computer units), is broken down into a control level (col. 6, lines 7-9) with at least one server (Fig. 2, ref. 96) and a client level with one or more client computers (Fig. 2, ref. 28),

the computer system including an automation category comprising system objects, said objects including at least one of physical system objects and processes (col. 6, lines 27-33 and col. 16, lines 1-5; wherein the physical system objects are alarms, valves, pump motors, and reactor heaters control by process control computers),

the automation category further comprising functions which incorporate said system objects in a process-related sequence (col. 20, lines 23-38), the automation category being developed within one standard context for different types of individual automation elements of an automated task (col. 15, lines 63-67; wherein the standard context is the preferred programming system controlling different types of automation elements such as alarms and valves) and being developed on the basis of server-related data elements and client-related data

elements (col. 16, lines 15-30; wherein the automated process is developed with a preferred programming language using server and client data such as server and client variables), and

wherein the automation elements are each compiled using server-related data elements, client-related data elements, and function elements, which are configured so as to optimize predetermined requirements of the automation elements (col. 15, lines 38-62).

Claim(s) 2: Pressnall teaches the automation system of claim 1, wherein

the server-related data elements are generated jointly with the automation category and remain fixed for the entire life of the automation category (col. 11, lines 12-15; wherein the server-related data ALARM, STEP, and SEQ variables are constant throughout the entire life of the automation category).

Claim(s) 3: Presnall teaches the automation system of claim 1, wherein

the client-related data elements are created when needed during an operating time of the automation category and are specific to client elements of the automation category (col. 9, lines 10-25; wherein the client-related data elements are created via a User Input to the system with AK and DK data type variables).

Claim(s) 4: Presnall teaches the automation system of claim 1, wherein

server elements of the automation category exist permanently for the life of the automation category (col. 12, lines 15-27; wherein the server elements or system global variables such as the ALARM exists permanently for the life of the automation category).

Claim(s) 5: Presnall teaches the automation system of claim 1, wherein

the client elements of the automation category are created and deleted when needed during an operating time of the automation category (col. 9, lines 10-25; wherein the SPECIAL variable is created and used for special purposes only, and gets deleted when there are no special purposes, and so is the STEP variable).

Claim(s) 6: Presnall teaches the automation system of claim 1, wherein

a plurality of client elements of the automation category exists simultaneously (col. 10, lines 10-13; wherein the user enters at the workstation the analog and digital values or client elements which exist simultaneously in order for the system to process the values).

Claim(s) 7: Pressnall teaches the automation system of claim 1, wherein

client elements of the automation category are linked to a corresponding pre-existing server element thereof as and when the client elements are created (col. 5, lines 12-15; wherein the backbone is the linked that links the workstation or

operator stations to the front end mechanized computer-controlled manufacturing process).

Claim(s) 8, 19: Pressnall teaches the automation system of claim 1, wherein individual automation elements are graphically and textually integrated in the automation category (col. 20, lines 33-38; wherein the graphical rendering of program statements integrate graphical and textual elements).

Claim(s) 9: Pressnall teaches the automation system of claim 1, wherein the automation elements are defined via at least one of a control system, an alarm system, a display, a user interface, a data input, and a data evaluation system (col. 16, lines 1-4).

Claim(s) 10, 18, 27: Pressnall teaches the automation system of claim 1, wherein the automation elements are each categorized as one of server elements and client elements depending on subsequent application, technical requirements, and execution thereof (col. 5, lines 8-15; wherein the clients elements are the operator stations or workstations, and the server elements are the control computers and communication processors).

Claim(s) 11: Pressnall teaches the automation system of claim 1, wherein



the automation elements include automation elements relating to a control system and data input, and wherein the automation elements relating to the control system and data input constitute server elements (col. 2, lines 29-34; wherein the process control system is part of the server elements that serves the computer operator via user input).

Claim(s) 12: Pressnall teaches the automation system of claim 1, wherein

the automation elements include automation elements relating to a user interface, display, and data evaluation, and wherein the automation elements relating to the user interface, display, and data evaluation constitute client elements (col. 2, lines 29-34; wherein the display system that provides quick comprehensive information is part of the client where the user can evaluate and comprehend).

Claim(s) 13: Pressnall teaches the automation system of claim 1, wherein

automation elements have functions(col. 2, lines 61-63 and col. 20, lines 23-38).

Claim(s) 14, 20: Pressnall teaches the automation system of claim 1, wherein

the function elements cooperate with the client-related data elements and the server-related data elements (It is inherent that in a client/server environment clients are exchanging data with server, and the process has to cooperate and communicate by means of functional modules).

Claim(s) 15: Pressnall teaches the automation system of claim 1, wherein the subsidiary aspects of the automation elements are provided in the form of one or more of a configuration interface, an image processing system, a simulation, and documentation (col. 12, lines 46-54; wherein the subsidiary aspect of the automation elements is in the form of configuration interface. The programming engineer configures the system so that the high signal is associated with the at rest condition or low energy state).

Claim(s) 16: Pressnall teaches the automation system of claim 1, wherein the control level is provided with at least one server pair to provide a redundant structure (Fig. 2 and Abstract).

Claim(s) 26: Pressnall teaches the method of claim 17, wherein several automation categories are in turn compiled to form a separate automation category and represent processes accordingly (col. 9, lines 27-48; wherein the several programming modules with different functions are compiled and run separately on different levels).

Claim(s) 28: Pressnall teaches the method of claim 17, wherein the server elements exists for the entire life of the automation category (col. 12, lines 15-27; wherein the server elements or system global variables such as the

ALARM exists permanently for the life of the automation category) and the client elements are created from scratch every time the respective function or the respective automation element is needed (col. 9, lines 10-25; wherein the client-related data elements are created via a User Input to the system with AK and DK data type variables).

Claim(s) 29: Pressnall teaches the method of claim 17, wherein

each of the server elements exists permanently and once only per automation category (col. 12, lines 15-27; wherein each of the server elements or system global variables such as the ALARM exists permanently for the life of the automation category) and wherein at least one of the client elements exists on a multiple basis and simultaneously (col. 9, lines 10-25; wherein the client-related data elements are created via a User Input to the system with AK and DK data type variables and exists on a multiple basis and simultaneously).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pressnall in view of Rao (US Patent 6,078,929).

Art Unit: 2141

Claim(s) 21, 22, 23: Pressnall teaches the method of claim 17, but fails to teach

the automation category is published in a library accessible by network devices and a plurality of automation categories of different types are published in the library, and wherein the different types of automation categories of the library are made available to users via a global, network facility.

Rao, in an analogous art, teaches a shared library accessible by the access server and other applications and the shared library is available to Internet users via a global, network facility namely the Internet file system (Abstract). It would be obvious to one of ordinary skill in the art at the time of the invention to combine Pressnall's method of solving an automated task definition with Rao's step of publishing in a shared library accessible by the access server and available to Internet users, for the advantage of ease of access and available through the transparent usage of existing protocols (col. 2, lines 35-40).

Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pressnall in view of Hickman (US Patent 6,178,548).

Claim(s) 24, 25: Pressnall teaches the method of claim 17, but fails to teach

the automation categories are compiled from one or more individual copies of one or more automation categories and the structure of the data record and the functions of said automation categories are imported into each copy of the

automation categories that are linked to the automation category with a programming means that is also used to create the automation categories. Hickman, in an analogous art, teaches compilation unit containing all necessary debugging information for a C++ link library referenced from any other object modules for the program generated by the compiler (col. 3, lines 1-12). It would be obvious to one of ordinary skill in the art at the time of the invention to combine Pressnall's method of solving an automated task definition with Hickman's step of compiling individual copies of the C++ modules and used as a binary class library for other main modules to import and linked, for the advantage of providing necessary debugging information at run-time when using the binary class module (col. 3, lines 1-12).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tan Lien whose telephone number is (703) 305-6018. The examiner can normally be reached on Monday-Thursday from 8:30am to 6pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached at (703) 305-4003. The fax phone number for this Group is (703) 305-3718.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [tan.lien@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER